

SYSTEM AND METHOD FOR TRANSITIONING BETWEEN ENGINE DEVICE SCHEDULES BASED ON ENGINE OPERATING CONDITION

Abstract

A method and system are provided for controlling a device in an internal combustion engine such as a spark plug, a camshaft actuator, an EGR valve actuator, etc. The method and system are designed to compensate for changes in environmental operating conditions of the engine not accounted for in control variable scheduling. A parameter value is determined responsive to one or more engine operating conditions (e.g., ambient temperature, engine oil temperature, etc.). Potential values for the parameter are divided into predetermined value ranges. A schedule of control values for the device is then selected from among a plurality of control value schedules for the device responsive to the parameter value. Each control value schedule in the plurality of control value schedules corresponds to one of the aforementioned value ranges for the parameter. The device is then controlled responsive to a

control value obtained from the selected control value schedule.